

A NEW SPECIES OF *ECTENOPSIS* (*PARANOPSIS*) (DIPTERA: TABANIDAE)  
FROM NEW ZEALAND AND A KEY TO SPECIES OF THE  
SUBGENUS *PARANOPSIS*

JOHN F. BURGER

Department of Zoology, University of New Hampshire, Durham, NH 03824, U.S.A.

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**Abstract.**—*Ectenopsis* (*Paranopsis*) *mackerrasi*, n. sp., from the North Island of New Zealand is described and illustrated. It is compared to *Ectenopsis lutulensis* (Hutton), the only other known species in this subgenus, and a key to the subgenus *Paranopsis* Mackerras is provided.

**Key Words:** Diptera, Tabanidae, Pangoniini, *Ectenopsis* (*Paranopsis*), Australasian Region, New Zealand, Key to Species

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Mackerras (1955) described *Paranopsis* as a subgenus of *Ectenopsis*, based on *Ectenopsis lutulentus* (Hutton). Only females were available for study. This paper describes a second species in the subgenus *Paranopsis*, supplements the generic definition provided by Mackerras, and includes a key to the species of *Ectenopsis* (*Paranopsis*). The subgenus *Paranopsis* is restricted to New Zealand.

Genus *Ectenopsis* Macquart, subgenus  
*Paranopsis* Mackerras

*Paranopsis* Mackerras, 1955: 473, fig. 16.

Type-species: *Apatolestes lutulentus* Hutton, 1901. New Zealand.

Eyes bare, without color pattern, those of male with enlarged facets on upper  $\frac{2}{3}$ , distinctly separated from area of smaller facets below. Ocellar tubercle raised and prominent. Front wide, index 2, without frontal callus. Face convex. Third antennal segment with basal 4 flagellomeres widened and partially to mostly fused, apical four flagellomeres clearly defined, apical flagellomere longer than preceding three flagellomeres combined. Maxillary palpi rather flattened, longer than shaft of proboscis,

those of male slender, gradually tapered to blunt apex, about  $\frac{1}{3}$  length of proboscis. Proboscis about equal to head height, stout, with large, soft labella. Hind tibial spurs unusually large and powerful. Cerci as in *Perisilvius* Ferguson. Male genitalia similar to those of other subgenera of *Ectenopsis* (Mackerras 1955).

*Ectenopsis* (*Paranopsis*) *mackerrasi*  
**Burger, NEW SPECIES**  
(Figs. 1, 2)

Holotype male.—Length: 11.6 mm. Holoptic, eyes black, without color pattern, upper  $\frac{2}{3}$  of eyes with facets enlarged, distinctly separated from area of small facets below. Ocellar tubercle large, gray tomentose, distinctly raised above level of eyes, ocelli distinct. Frontal triangle yellowish gray tomentose, bare. Frontoclypeus and genae gray tomentose, white pilose. Beard white. Antennae with scape and pedicel gray tomentose, pilosity yellowish on scape, mixed yellowish and black on pedicel, flagellum reddish brown, basal four flagellomeres enlarged, partially fused, apical four flagellomeres clearly defined, the apical one long and slender, distinctly longer than preceding

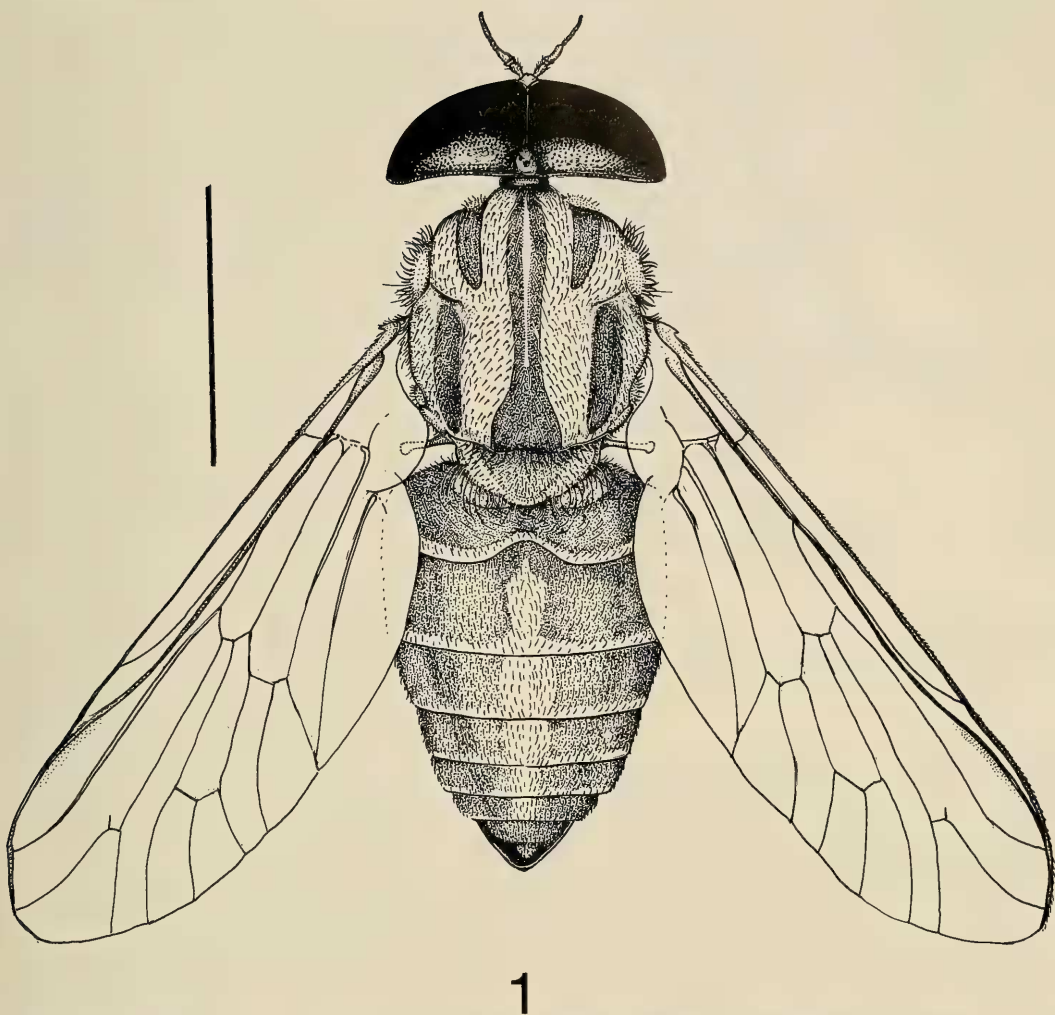


Fig. 1. Holotype male of *Ectenopsis (Paranopsis) mackerrasi*, dorsal view. Scale bar = 4.0 mm.

three flagellomeres combined. Maxillary palpi gray tomentose, basal palpomere globular, apical palpomere slender, elongate, gradually tapered to blunt apex, about  $\frac{1}{3}$  length of proboscis, palpi mostly white pilose, with mixed black and white hairs apically. Proboscis gray-brown, labellum large, unsclerotized.

Mesoscutum gray tomentose with a pair of broad submedian and sublateral brown stripes extending its entire length. Scutellum gray tomentose with broad median brown marking, both mesoscutum and scutellum bearing long silky white hairs. No-

toleural lobes gray tomentose, white pilose above, black pilose below. Pleuron gray tomentose and white pilose. Legs with coxae gray tomentose, pale pilose, femora brown, darker black-brown subapically, tibiae brown, becoming black-brown apically, hind tibial spurs very large, strongly curved apically, tarsi black-brown. Wings subhyaline with a grayish cast, veins dark brown, sc bare above and below, vein  $R_4$  with spur.

Abdominal tergites gray tomentose with pale yellowish gray posterior margins and distinct brown markings, tergite 1 with broad submedian crescent-shaped mark-

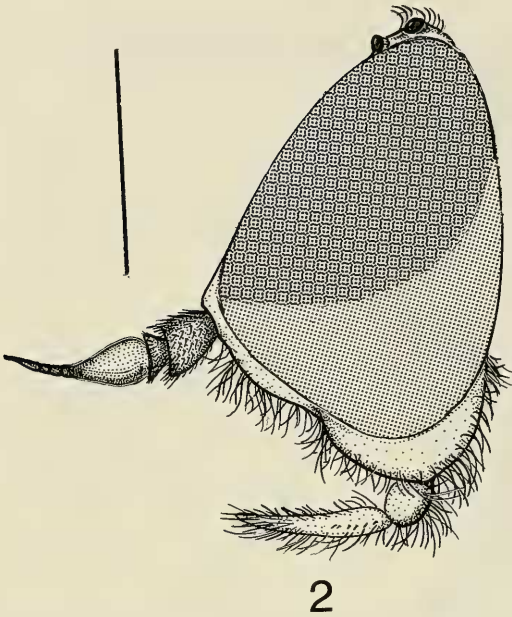


Fig. 2. Head of *Ectenopsis* (*Paranopsis*) *mackerrasi*, holotype male, lateral view. Scale bar = 2.0 mm.

ings, tergites 2–6 with pair of large submedian subquadrate brown patches enclosing a median gray tomentose triangular area, the brown markings largest on tergites 2–3, progressively reduced on posterior segments, tergites predominantly pale pilose. Sternites gray tomentose, white pilose. Ninth tergite (epandrium) large, undivided, shield-shaped. Aedeagus gradually tapered posteriorly, as in *Ectenopsis* (*Perisilvius*). Gonocoxites relatively slender, gradually tapered posteriorly. Gonostyli bifid, outer lobe broadly rounded apically, inner lobe more slender apically and more strongly pointed, as in *Ectenopsis* (*Ectenopsis*).

Holotype male.—NEW ZEALAND: North Isl., Maropiu Distr., Omamari Beach N. of Dargaville, 5. III. 1969, James E. Tob-

ler. In the collection of the California Academy of Sciences, San Francisco, U.S.A.

**Etymology.**—This species is named for the late Ian M. Mackerras, whose studies on the classification of Tabanidae and the Australasian and Oceanian fauna laid the foundation for the modern classification of Tabanidae and the diversity of Tabanidae of New Guinea, Australia, New Zealand and the Pacific Islands.

**Discussion.**—*Ectenopsis lutulentus* is known only from the South Island, although Mackerras (1957) cites a questionable record from Taranaki, in the southwestern part of the North Island. *E. mackerrasi* is known only from the northern part of the North Island. Although *E. lutulensis* is known only from female specimens and the species described here is known from a single male specimen, I am confident that they represent distinct species because other described species of *Ectenopsis* for which both sexes are known show little sexual dimorphism.

#### KEY TO SPECIES OF *ECTENOPSIS* (*PARANOPSIS*)

- Mesoscutum and abdomen both without distinct brown markings . . . . . *lutulentus* (Hutton) (♀)
- Mesoscutum bearing distinct brown stripes and abdomen bearing large brown submedian quadrate markings . . . . . *mackerrasi* n. sp. (♂)

#### LITERATURE CITED

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